

In the Claims

The status of claims in the case is as follows:

1 1. [Currently amended] A method for monitoring a computer
2 application software system by reading log records written
3 by said software system to determine performance of said
4 software system relative to response time to end users,
5 comprising:

6
7 adjustably tuning performance evaluation bias by a
8 computer software monitoring system between processor
9 and memory consumption; [[and]]

10 responsive to said bias, monitoring performance of said
11 computer application software system with respect to
12 transaction time parameters including said response
13 time to end users; and

14 receiving from a user a first tuning parameter for
15 allocating memory for said monitoring performance and a
16 second tuning parameter for specifying time out for in-
17 flight units of work.

1 2-3. [Canceled]

1 4. [Currently amended] The method of ~~claim 2~~ claim 1,
2 further comprising:

3 initializing said memory with an in-flight transactions
4 vector table for anchoring synonym chains of in-flight
5 transaction cells;

6 accumulating time statistics for in-flight transactions
7 in said in-flight transaction cells;

8 initializing said memory with a completed transactions
9 table for storing time statistics for completed
10 transactions;

11 receiving from said computer ~~application~~ software
12 system a transaction log record for a unit of work;

13 hashing said first transaction log record to select
14 from said vector table an anchor to an in-flight
15 transaction cells chain corresponding to said unit of
16 work;

17 searching said in-flight transaction cells chain for
18 said unit of work;

19 responsive to finding said unit of work in said in-
20 flight transaction cells chain, capturing to said in-
21 flight transaction cell timing statistics from said
22 transaction log record;

23 responsive to not finding said unit of work in said in-
24 flight transaction cells chain, chaining a new in-
25 flight transaction cell to said chain and capturing to
26 said new in-flight transaction cell timing statistics
27 from said transaction log record; and

28 determining if said transaction log record completes a
29 transaction and, if so, updating said completed
30 transactions table with timing statistics for said

31 transaction and removing said in-flight transaction
32 cell from said in-flight transaction cells chain.

1 5. [Currently amended] The method of ~~claim 3~~ claim 1,
2 further comprising

3 initializing said memory with an in-flight transactions
4 vector table for anchoring synonym chains of in-flight
5 transaction cells;

6 accumulating time statistics for in-flight transactions
7 in said in-flight transaction cells;

8 initializing said memory with a completed transactions
9 table for storing time statistics for completed
10 transactions;

11 receiving from said computer ~~application~~ software
12 system a transaction log record for a unit of work;

13 hashing said first transaction log record to select
14 from said vector table an anchor to an in-flight
15 transaction cells chain corresponding to said unit of
16 work;

17 searching said in-flight transaction cells chain for
18 said unit of work;

19 responsive to finding said unit of work in said in-
20 flight transaction cells chain, capturing to said in-
21 flight transaction cell timing statistics from said
22 transaction log record;

23 responsive to not finding said unit of work in said in-
24 flight transaction cells chain, chaining a new in-
25 flight transaction cell to said chain and capturing to
26 said new in-flight transaction cell timing statistics
27 from said transaction log record;

28 determining if said transaction log record completes a
29 transaction and, if so, updating said completed
30 transactions table with timing statistics for said
31 transaction and removing said in-flight transaction
32 cell from said in-flight transaction cells chain; and

33 determining responsive to said second tuning parameter
34 if a selected unit of work being accumulated in a
35 selected in-flight transaction cell has timed out, and
36 if so removing from said selected in-flight transaction
37 cell from said in-flight transaction cell chain and
38 selectively updating said completed transactions table
39 with timing statistics for said selected unit of work.

·1 6. [Currently amended] A system for monitoring a computer
2 application software system by reading log records written
3 by said software system to determine performance of said
4 software system relative to response time to end users,
5 comprising:

6 a first user actuated tuning knob for allocating space
7 in memory for performance monitoring;

8 a second user actuated tuning knob for a specifying
9 time out value for in-flight units of work; and

10 a transaction monitor responsive to said first and
11 second user actuated tuning knobs for accumulating, in
12 synonym chain cells in said space, timing statistics
13 for a plurality of said in-flight units of work.

1 7. [Original] The system of claim 6, further comprising:

2 said memory including an in-flight transactions vector
3 table for anchoring synonym chains of in-flight
4 transaction cells;

5 said in-flight transaction cells for accumulating time
6 statistics for in-flight transactions;

7 said memory including a completed transactions table
8 for storing time statistics for completed transactions;

9 a monitor for receiving from said computer ~~application~~
10 software system a transaction log record for a unit of
11 work;

12 said monitor hashing said first transaction log record
13 to select from said vector table an anchor to an in-
14 flight transaction cells chain corresponding to said
15 unit of work;

16 said monitor for searching said in-flight transaction
17 cells chain for said unit of work;

18 said monitor further responsive to finding said unit of
19 work in said in-flight transaction cells chain for
20 capturing to said in-flight transaction cell timing

21 statistics from said transaction log record;

22 said monitor further responsive to not finding said
23 unit of work in said in-flight transaction cells chain
24 for chaining a new in-flight transaction cell to said
25 chain and capturing to said new in-flight transaction
26 cell timing statistics from said transaction log
27 record;

28 said monitor further for determining if said
29 transaction log record completes a transaction and, if
30 so, updating said completed transactions table with
31 timing statistics for said transaction and removing
32 said in-flight transaction cell from said in-flight
33 transaction cells chain; and

34 said monitor further for determining responsive to said
35 second tuning knob if a selected unit of work being
36 accumulated in a selected in-flight transaction cell
37 has timed out, and if so removing from said selected
38 in-flight transaction cell from said in-flight
39 transaction cell chain and selectively updating said
40 completed transactions table with timing statistics for
41 said selected unit of work.

1 8. [Currently amended] A program storage device readable
2 by a machine, tangibly embodying a program of instructions
3 executable by a machine to perform method steps for
4 monitoring a computer ~~application~~ software system by reading
5 log records written by said software system to determine
6 performance of said software system relative to response
7 time to end users, said method comprising:

adjustably tuning performance evaluation bias between
processor and memory consumption; [[and]]

responsive to said bias, monitoring performance of said
computer ~~application~~ software system with respect to
transaction time parameters; and

receiving from a user a first tuning parameter for
allocating memory for said monitoring performance and a
second tuning parameter for specifying time out for in-
flight units of work.

9-10. [Canceled]

11. [Currently amended] The program storage device of
~~claim 9~~ claim 8, said method further comprising:

initializing said memory with an in-flight transactions
vector table for anchoring synonym chains of in-flight
transaction cells;

accumulating time statistics for in-flight transactions
in said in-flight transaction cells;

initializing said memory with a completed transactions
table for storing time statistics for completed
transactions;

receiving from said computer ~~application~~ software
system a transaction log record for a unit of work;

hashing said first transaction log record to select

14 from said vector table an anchor to an in-flight
15 transaction cells chain corresponding to said unit of
16 work;

17 searching said in-flight transaction cells chain for
18 said unit of work;

19 responsive to finding said unit of work in said in-
20 flight transaction cells chain, capturing to said in-
21 flight transaction cell timing statistics from said
22 transaction log record;

23 responsive to not finding said unit of work in said in-
24 flight transaction cells chain, chaining a new in-
25 flight transaction cell to said chain and capturing to
26 said new in-flight transaction cell timing statistics
27 from said transaction log record; and

28 determining if said transaction log record completes a
29 transaction and, if so, updating said completed
30 transactions table with timing statistics for said
31 transaction and removing said in-flight transaction
32 cell from said in-flight transaction cells chain.

1 12. [Currently amended] The program storage device of
2 ~~claim 10~~ claim 8, said method further comprising

3 initializing said memory with an in-flight transactions
4 vector table for anchoring synonym chains of in-flight
5 transaction cells;

6 accumulating time statistics for in-flight transactions

7 in said in-flight transaction cells;

8 initializing said memory with a completed transactions
9 table for storing time statistics for completed
10 transactions;

11 receiving from said computer ~~application~~ software
12 system a transaction log record for a unit of work;

13 hashing said first transaction log record to select
14 from said vector table an anchor to an in-flight
15 transaction cells chain corresponding to said unit of
16 work;

17 searching said in-flight transaction cells chain for
18 said unit of work;

19 responsive to finding said unit of work in said in-
20 flight transaction cells chain, capturing to said in-
21 flight transaction cell timing statistics from said
22 transaction log record;

23 responsive to not finding said unit of work in said in-
24 flight transaction cells chain, chaining a new in-
25 flight transaction cell to said chain and capturing to
26 said new in-flight transaction cell timing statistics
27 from said transaction log record;

28 determining if said transaction log record completes a
29 transaction and, if so, updating said completed
30 transactions table with timing statistics for said
31 transaction and removing said in-flight transaction

32 cell from said in-flight transaction cells chain; and
33 determining responsive to said second tuning parameter
34 if a selected unit of work being accumulated in a
35 selected in-flight transaction cell has timed out, and
36 if so removing from said selected in-flight transaction
37 cell from said in-flight transaction cell chain and
38 selectively updating said completed transactions table
39 with timing statistics for said selected unit of work.

1 13. [Currently amended] A computer program ~~product~~ storage
2 device for storing programming instructions for monitoring a
3 computer ~~application~~ software system by reading log records
4 written by said software system to determine performance of
5 said software system relative to response time to end users
6 according to the method comprising:

7 first program instructions for adjustably tuning
8 performance evaluation bias by a software system
9 monitor between processor and memory consumption; and

10 second program instructions, responsive to said bias,
11 for monitoring performance of said computer ~~application~~
12 software system with respect to transaction time
13 parameters; and wherein

14 said first and second program instructions are recorded
on said storage device.